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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,084	01/15/2002	Takaya Sato	0171-0811P-SP	2914
2292	7590	03/01/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

H1

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/045,084	SATO ET AL.
	Examiner Hoai V. Le	Art Unit 1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) See Continuation Sheet is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

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This application is before the examiner for consideration on the merits.

I. The application has been carefully studied.

- (1) There has been no unusual or unexpected result with respect to any particle size.
- (2) There has been no unusual or unexpected result with respect to any polymer binder.
- (3) There has been no unusual or unexpected result with respect to any product-by-process.
- (4) There has been no unusual or unexpected result with respect to any amount of the requisite chemical ingredients.

Accordingly, they have and are given a little to no value for patentability as an alternative or a matter of choice of an equivalent functional material to one having ordinary skill in the art.

Applicants are urged to show or provide a convincing evidence of an unusual or unexpected result to overcome a rejection on and for the record for the patentability of the claimed embodiment.

II. The language "prepared by..." in a material claim is considered a product-by-process. It has and is given a little to no value until applicants could be able to show or provided a convincing evidence that the claimed product-by-process would be able to provide an unusual or unexpected result over that of the applied reference. But it is given full value in a method or process of making only.

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III. A. (1) It is allowed to claim by a functional, characteristic, physical and/or chemical property of a material and /or process. (2) However, a claimed functional, characteristic, physical and/or chemical property of a material and/or process carries with a risk (In re In re Schreiber, 44 USPQ2d 1432). It is reasonable that the Office is not supplied, provided or equipped with a sufficient facility to carry out a test for the functional, characteristic, physical and/or chemical properties as claimed in accordance with the authority stated in In re Best, 195 USPQ 430; Ex parte Maizel, 27 USPQ2d 1662 or Ex parte Phillip, 28 USPQ2d 1302. The language “battery active material”, “electrically conductive powder”, “particle size...” or the like is considered as the functional and characteristic, chemical and/or physical property of a material.

(B) In re Schreiber, 44 USPQ2d 1429 state that “A patent applicant is free to recite features of an apparatus either structurally or functionally. See In re Swinehart... 169 USPQ 226, 228... Yet, choosing to define an element functionally, i.e., by what it does, carries with a risk. As our predecessor court state in Swinehart... where the Patent Office has reasons that the functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.”

IV. The language “battery active material” is considered and searched as a powder because there is a “powder mixture” and not an “electrically conductive” able powder since it would have no value as being a double inclusion as that of an “electrically conductive powder” under 35 USC 112 for an invalid claim structure.

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V. There are four groups of the claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention. They are not considered to be patentably different or distinct. Accordingly, no separation or search is made. Should applicants show or urge otherwise in the next response to this application in order for it to be considered timely. A restriction will be made for the record as shown or urged.

VI. Applicants' prior art submission has been considered in English language as provided.

VII. An initial search has found about two dozens of the references that would be able to applied on at least the main invention of claim 2. A set of at least three references will be applied when each and all applied references on the record are overcome.

VIII. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over (Japanese Application '243 as submitted with an English equivalent being requested and required to submitted before or as the same time of an appeal brief is filed. Otherwise, the appeal brief will be not considered and be dismissed) and Catherino (3,888,695).

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Patentees in the Japanese application disclose, teach and suggest a powder mixture comprising least two different kinds of particle mixture and one of them being an electrically conductive particle. Please see the whole disclosure of each of the applied references, especially in Japanese application at the Abstract as provided. The language "prepared by" has and is given a little to no value in a material claim. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed product-by-process over that of the applied references for the patentability of the claims. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed particle size those out side of the claims and binder over that of the applied reference for the patentability of the claims. Otherwise, they would have not patentable value and considered as a matter of choice of one having ordinary skill in the art to use an equivalent or functional material. However, Catherino at col.5:59-62 is cited to show an equivalent or functional binder in the art. Since the about references are related to electrical power producing materials, it would have been obvious to one having ordinary skill in the art to cite one or more conventional or known functional materials in the art for about the same result as known and applied in the art with no patentable value. Applicants show or provide an evidence to the contrary, especially with known Teflon 30 binder as applied on the record.

IX. Claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Catherino (3,888,695) and Kweon et al (5,415,833).

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Catherino discloses, teaches and suggests a powder mixture comprising least two different kinds of particle mixture and one of them being an electrically conductive particle. Please see the whole disclosure of each of the applied references, especially in Catherino at col.5:55-63 and . Kweon et al at col.5:4-5 is cited to show "Inco 255 Ni powder" has particle size of about 3 microns and polyvinyl butyral binder. The language "prepared by" has and is given a little to no value in a material claim. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed product-by-process over that of the applied references for the patentability of the claims. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed particle size those out side of the claims and binder over that of the applied reference for the patentability of the claims. Otherwise, they would have not patentable value and considered as a matter of choice of one having ordinary skill in the art to use an equivalent or functional material. Since the about references are related to electrical power producing materials, it would have been obvious to one having ordinary skill in the art to cite one or more conventional or known functional materials in the art for about the same result as known and applied in the art with no patentable value. Applicants show or provide an evidence to the contrary, especially with known Teflon 30 and polyvinyl butyral binders as applied on the record.

X. Claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Gao et al (5,972,055).

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Gao et al disclose, teach and suggest a powder mixture comprising least two different kinds of particle mixture and one of them being an electrically conductive particle. Please see the whole disclosure of each of the applied references, especially in Gao et al at Examples 2 and 4. The language "prepared by" has and is given a little to no value in a material claim. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed product-by-process over that of the applied references for the patentability of the claims. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed particle size those outside of the claims and binder over that of the applied reference for the patentability of the claims. Otherwise, they would have not patentable value and considered as a matter of choice of one having ordinary skill in the art to use an equivalent or functional material. Since the about reference is related to electrical power producing materials, it would have been obvious to one having ordinary skill in the art to cite one or more conventional or known functional materials in the art for about the same result as known and applied in the art with no patentable value. Applicants show or provide an evidence to the contrary, especially with known KYNACK Lex 2801 binder, LixMn204 powder from Kerr Mc Gee and SUPER-P powder from M.M.M. Carbon, Willebrock and SFG-15 powder from Lonza G&T particles as applied on the record.

XI. Claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al (5,910,381).

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Barker et al disclose, teach and suggest a powder mixture comprising least two different kinds of particle mixture and one of them being an electrically conductive particle. Please see the whole disclosure of each of the applied references, especially in Barker et al at Examples 2 and 4. The language "prepared by" has and is given a little to no value in a material claim. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed product-by-process over that of the applied references for the patentability of the claims. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed particle size those outside of the claims and binder over that of the applied reference for the patentability of the claims. Otherwise, they would have not patentable value and considered as a matter of choice of one having ordinary skill in the art to use an equivalent or functional material. Since the about reference is related to electrical power producing materials, it would have been obvious to one having ordinary skill in the art to cite one or more conventional or known functional materials in the art for about the same result as known and applied in the art with no patentable value. Applicants show or provide an evidence to the contrary, especially with known KYNACK Lex 2801 binder, LixMn204 powder from Kerr Mc Gee and SUPER-P powder from M.M.M. Carbon, Willebrock and BG-55 powder from Super Graphite Co. particles as applied on the record.

XII. Claims (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Weckesser al (6,489,058).

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Weckesser et al disclose, teach and suggest a powder mixture comprising least two different kinds of particle mixture and one of them being an electrically conductive particle. Please see the whole disclosure of each of the applied references, especially in Weckesser et al at Examples. The language "prepared by" has and is given a little to no value in a material claim. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed product-by-process over that of the applied references for the patentability of the claims. Applicants are requested, urged and required to show or provide a convincing evidence of an unusual or unexpected result of the claimed particle size those out side of the claims and binder over that of the applied reference for the patentability of the claims. Otherwise, they would have not patentable value and considered as a matter of choice of one having ordinary skill in the art to use an equivalent or functional material. Since the about reference is related to electrical power producing materials, it would have been obvious to one having ordinary skill in the art to cite one or more conventional or known functional materials in the art for about the same result as known and applied in the art with no patentable value. Applicants show or provide an evidence to the contrary, especially with known nickel hydroxide being co-precipitated with zinc and cobalt powder from Tanake, 210 nickel powder from Inco Ltd., cobalt oxide from Tanake and Kraton G1654 binder from Shell as applied on the record.

XIII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332. The examiner can normally be reached from 6:00 AM to 4:00 PM on Monday though Thursday

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and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone numbers of the examiner is 571-273-1332. Since there is a newly electronic filing procedure for all initial communicating papers and all responses to an Office action, the examiner fax phone number is not for use to receive any fax in response to an Office action. Applicant is requested and required to send all initial communicating papers and all response to Office action to a central paper or fax receiving center for an electronic scanning procedure.

Applicants may file a paper by (1) fax with a central facsimile receiving number 703-872-9306,

(2) mail with a central mail receiving address:

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Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
23 February 2004

HOA VAN LE  
PRIMARY EXAMINER  
*Hoa Van Le*

Continuation of Disposition of Claims: Claims rejected are (2-12), (1), (13 and 17-26) and (14-16) with the broadest claim 2 as the main invention .